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EXAMINER

MATTISON, LORI K

ART UNIT

PAPER NUMBER

1619

MAIL DATE

DELIVERY MODE

05/27/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/579,814	PANIN, GIORGIO	
	<b>Examiner</b>	<b>Art Unit</b>	
	LORI MATTISON	1619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 16-41 is/are pending in the application.
- 4a) Of the above claim(s) 39-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/06/2006</u> .                                              | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

The Group and/or Art Unit location of your application in the PTO has changed.

All correspondence regarding this application should be directed to Group Art  
Unit 1619.

### ***Status of Claims***

.Applicant's amendments filed 02/12/2009 to claims 17, 18, and 41 have been entered. Claims 1-15 have been cancelled. Claim 23 has been added. Claims 16- 41 remain pending in the current application, of which claims 16-38 are being considered on their merits. Claims 39-41 remain withdrawn from consideration at this time. References not included with this Office action can be found in a prior action. Any rejections of record not particularly addressed below are withdrawn in light of the claim amendments and applicant's comments.

### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 16-38, drawn to a cosmetic or dermatological composition comprising a) active substances, b) polyphenols, c) carrier and d) perfluoropolyether phosphate.

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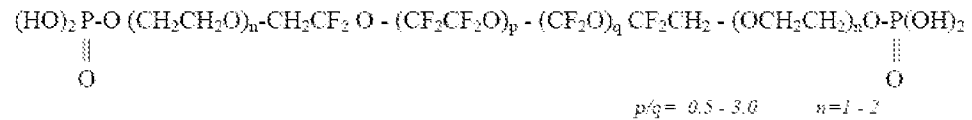
Group II, claim(s) 39-41, drawn to a method of using the polyfluoropolyether phosphate diphosphate of formula 1 to stabilize cosmetic and or dermatological compositions.

The inventions listed as Groups I and II, do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: they do not share the same structural element(s) that define the “special technical feature” necessary to specify a contribution over the prior art. The structural moiety, element, or step common to Groups I-II is the perfluoropolyether phosphate.

Example 17a of EP 1,074,243 (Pantini, 2000; page 10, paragraphs 77-78) teaches the perfluoropolyether diphosphate, Fomblin HC/P2-1000. Fomblin HC/P2-1000 is taught by Schliemann-Willers to have the CAS Registry number 200013-65-6. As evidenced by Fomblin HC/P2-1000 product information sheet, the chemical formula for the CAS Registry number 200013-65-6 is:

**FOMBLIN® HC/P2-1000**

### Chemical Structure



### Identification

<i>INCI Name:</i>	Polypertfluoroethoxymethoxy Difluoroethyl PEG Phosphate
<i>Other Chemical Names:</i>	Perfluoropolyether phosphate, Perfluoropolyether acid phosphate, Perfluoropolyether PEG phosphate, PFPE-1000 phosphate
<i>CAS Number:</i>	200013-65-6
<i>CAS Name:</i>	Diphosphoric acid, polymers with ethoxylated reduced Me esters of reduced poly(m) oxidized tetrafluoroethylene
<i>EINECS Number:</i>	Not applicable (since it is a polymer)

and thus teaches the perfluoropolyether diphosphate as recited by instant claims 16 and 39.

Since the perfluoropolyether diphosphate was already known in the art, it therefore, cannot be said to be the special technical feature that makes a contribution over the prior art. All other structural moieties, elements, or steps differ materially from one another. Thus, these claims lack the corresponding special technical feature(s) necessary to link them together to fulfill the Unity of Invention requirement.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112.

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Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b).

Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01

Applicant's election with traverse of claims 16-38, in the reply filed on 02/12/2009 is acknowledged.

Applicant alleges that there is no serious search burden and therefore the examiner is required to search Groups I and II (M.P.E.P. § 803, second paragraph) (Reply, page 8, paragraph 4).

The examiner disagrees and finds applicant's traversal unpersuasive because the claims of the instant application do not fulfill the requirement of unity of invention under PCT Rules 13.1 and 13.2 (M.P.E.P. § 1850). The groups of invention (i.e. Group I and Group II) lack a technical relationship involving one or more of the same corresponding special technical features (PCT Rule 13.2; M.P.E.P. § 1850). As discussed above, the perfluoropolyether diphosphate

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which links Groups I and II was known and taught by Pantini and Schliemann-Willers. Thus, the groups of the instant application do not share a special technical feature and the requirement for unity of invention is not satisfied.

With regard to the search burden, M.P.E.P. § 1850 clearly states “that when the Office considers international applications as an International Searching Authority, as an International Preliminary Examining Authority, and during the national stage as a Designated or Elected Office under 35 U.S.C. 371, PCT Rule 13.1 and 13.2 will be followed when considering unity of invention of claims of different categories without regard to the practice in national applications filed under 35 U.S.C. 111.” “In applying PCT Rule 13.2 to international applications as an International Searching Authority, an International Preliminary Examining Authority and to national stage applications under 35 U.S.C. 371, examiners should consider for unity of invention all the claims to different categories of invention in the application and permit retention in the same application for searching and/or preliminary examination, claims to the categories which meet the requirements of PCT Rule 13.2.” Since PCT Rule 13.2, and *not* search burden under M.P.E.P. § 803, is the basis for restriction between categories in national stage applications under 35 U.S.C. 371, applicant’s arguments regarding search burden is moot in light of a demonstrated lack of unity of invention under PCT Rule 13.2. However, even if application of M.P.E.P. § 803 were appropriate; the lack of special technical feature in all of the claims creates a serious search burden since there is no unifying concept/feature shared among the claims. The direction provided by M.P.E.P. § 1850 regarding



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restriction among claims which demonstrate a lack of unity is clear and the Office is not required to follow the examination strategy of the International Search Authority when lack of unity of invention is present.

Claims 39-41 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 02/12/2009.

The examiner withdraws the previous species election, which was mailed on 01/13/2009, which required applicant to elect a species of R<sub>f</sub> moieties for examination.

Examination on the merits will commence on claims 16-38 ONLY.

### ***Specification***

The abstract of the disclosure is objected to because the WIPO face page is not a sufficient abstract. Correction is required. See MPEP § 608.01(b).

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18, 19, 22, 24, 26, 27, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 18 recites the broad recitation 400-1800, and the claim also recites preferably between 500-1300 which is the narrower statement of the range/limitation. Because claims 19, 22, 24, 26, 27, and 30 depend from indefinite claim 18 and do not clarify the point of confusion, they must also be rejected under 35 U.S.C. 112, second paragraph.

Claim 19 recites the limitation

"-CF<sub>2</sub>-O(CF<sub>2</sub>CF<sub>2</sub>O)<sub>b</sub>(CF<sub>2</sub>O)<sub>a</sub>-CF<sub>2</sub>-[CH<sub>2</sub>-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>O-PO(OH)<sub>2</sub>]<sub>2</sub>" in claim 19. There is insufficient antecedent basis for this limitation in the claim. In particular the "-CF<sub>2</sub>-O(CF<sub>2</sub>CF<sub>2</sub>O)<sub>b</sub>(CF<sub>2</sub>O)<sub>a</sub>" has an extra oxygen that is not

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present in the formula of formula I. Clarification is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 16, 20, 21, 23 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1,074,243 (Panti, 2000) in view of US Patent No. 6,066,311 (Cheetam, 2000)

With respect to instant claims 16 and 21, Pantini teaches that the composition of Example 17a is a cosmetic formulation, a sun cream (i.e. a cosmetic composition for topical use; page 10, paragraphs 77-78). The

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composition comprises the stabilizing agent the perfluoropolyether phosphates Fomblin HC/P2-1000 and Fomblin HC/R. With respect to instant claim 20, Example 17a utilizes Fomblin HC/P2-1000 and Fomblin HC/R in an amount of 3.0%. With respect to claim 38, Pantini teaches that the composition is a cream.

Pantini does not teach inclusion of polyphenols in his composition as set forth by instant claim 16.

Example 3 of Cheetam teaches that caffeic acid has advantageous UV absorption qualities and embodies caffeic acid in a sunscreen composition in an amount of 2% by weight (column 12, lines 30-55).

With respect to claims 16 and 23, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have added 2% caffeic acid to the sunscreen of Pantini because Cheetam teaches that polyphenols are advantageous UV absorbers that may be used in sunscreens.

With respect to claim 21, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention to have included at least one perfluoropolyether phosphate in the composition of Example 17a of Pantini in an amount of between 0.2 and 1.0% because Pantini teaches use of Fomblin HC/R in an amount of 1%.

With respect to claim 23, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention to have included caffeic acid in an amount of 2% by weight in Pantini's sun cream composition because Cheetam teaches inclusion of 2% by weight caffeic acid in sunscreens.

Claims 17, 18, 19, 22, and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Pantini and Cheetam as applied to claims 16, 20, 21, 23 and 38 above, and further in view of Schliemann-Willers as published in *Acta Dermato- Venereologica* in 2001 and as evidenced by the Fomblin HC/P2-1000 product information sheet as dated 09/2005 by Solvay Solexis.

With respect to claim 17, Pantini teaches that that perfluoropolyether diphosphate used in his invention has the general formula:

$$R_f[CF_2CH_2-O-(CHR_1CHR_2O)_n-P(O)(OH)_2]_x$$
 (pages 2 lines 40 end; page 3 (in its entirety) and page 4).

With respect to claims 17 and 22, Pantini teaches that Fomblin HC/P2-1000 was present in the composition of Example 17a in the amount of 2.0%.

Pantini does not teach the exact chemical formula perfluoropolyether diphosphate, Fomblin HC/P2-1000, which is utilized in the examples. Thus Pantini does not teach the  $R_f$ ,  $x$ ,  $R_1$ ,  $R_2$ , and,  $a$ ,  $b$ , and  $n$  moieties and integers set forth by instant claims 17 and 18.

Pantini does not teach that Fomblin HC/P2-1000 has the chemical structure of Formula II.

Pantini does not teach a polyphenol content between 0.1 and 5% the weight of the total composition as set forth by instant claim 24.

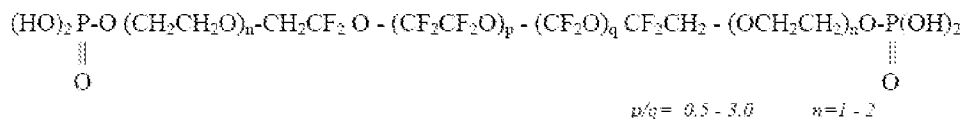
Schliemann-Willers teaches that Fomblin HC/P2 1000 and Fomblin HC/P2 2000 have the CAS number 200013-65-6 and differ just with respect to molecular weight (i.e. 1000 vs 2000; page 393, column 1, paragraph 5). As evidenced by

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the product information sheet for Fomblin HC/P2-1000, Fomblin HC/P2-1000 has the formula (page 1)

## FOMBLIN<sup>®</sup> HC/P2-1000

### Chemical Structure



### Identification

<i>INCI Name:</i>	Polyperfluoroethoxymethoxy Difluoroethyl PEG Phosphate
<i>Other Chemical Names:</i>	Perfluoropolyether phosphate, Perfluoropolyether acid phosphate, Perfluoropolyether PEG phosphate, PFPE-1000 phosphate
<i>CAS Number:</i>	200013-65-6
<i>CAS Name:</i>	Diphosphoric acid, polymers with ethoxylated reduced Me esters of reduced polymd oxidized tetrafluoroethylene
<i>EINECS Number:</i>	Not applicable (since it is a polymer)

With respect to instant claim 18, the examiner notes that the molecular weight of all the constituents of FOMBLIN HC/P2-1000, when  $n=1$ , absent the constituents of  $R_f = 426$ . Thus  $M_n = 574$ .

With respect to claim 17, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included a perfluoropolyether diphosphate with the formula  $R_f[\text{CF}_2\text{CH}_2-\text{O}-(\text{CHR}_1\text{CHR}_2\text{O})_n-\text{P}(\text{O})(\text{OH})_2]_x$  wherein  $x=2$ ,  $R_1$  and  $R_2$  are H,  $n=1$ , and  $R_f = (\text{CF}_2\text{O})$  and  $(\text{CF}_2\text{CF}_2\text{O})$  because Pantini teaches that the sun cream of Example 17a comprises Fomblin HC/P2-1000 and Fomblin HC/P2-1000 has the formula  $R_f[\text{CF}_2\text{CH}_2-\text{O}-(\text{CHR}_1\text{CHR}_2\text{O})_n-\text{P}(\text{O})(\text{OH})_2]_x$  wherein  $x=2$ ,  $R_1$  and  $R_2$  are H,  $n=1$ ,

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and  $R_f = (\text{CF}_2\text{O})$  and  $(\text{CF}_2\text{CF}_2\text{O})$  as taught by Schliemann-Willers and as evidenced by the Fomblin HC/P2-1000 product information sheet.

With respect to claim 18, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included a perfluoropolyether diphosphate with a  $R_f = -(\text{CF}_2\text{O})_a-(\text{CF}_2\text{CF}_2\text{O})_b-$  wherein  $b/a$  is between 0.5- 3.0 and  $M_n = 574$  because Pantini teaches that the sun cream of Example 17a comprises Fomblin HC/P2-1000 and Fomblin HC/P2-1000 has  $R_f = -(\text{CF}_2\text{O})_a-(\text{CF}_2\text{CF}_2\text{O})_b-$  wherein  $b/a$  is between 0.5- 3.0 and  $M_n = 574$  as taught by Schliemann-Willers and as evidenced by the Fomblin HC/P2-1000 product information sheet.

With respect to instant 19, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included a perfluoropolyether diphosphate with a formula that is  $-\text{CF}_2-\text{O}(\text{CF}_2\text{CF}_2\text{O})_b(\text{CF}_2\text{O})_a-\text{CF}_2-[\text{CH}_2-(\text{OCH}_2\text{CH}_2)_n\text{O}-\text{PO}(\text{OH})_2]_2$  wherein  $n=1$  or  $2$  and  $b/a = 0.5-3.0$  because Pantini teaches that the sun cream of Example 17a comprises Fomblin HC/P2-1000 and Fomblin HC/P2-1000 has a formula that is  $-\text{CF}_2-\text{O}(\text{CF}_2\text{CF}_2\text{O})_b(\text{CF}_2\text{O})_a-\text{CF}_2-[\text{CH}_2-(\text{OCH}_2\text{CH}_2)_n\text{O}-\text{PO}(\text{OH})_2]_2$  wherein  $n=1$  or  $2$  and  $b/a = 0.5-3.0$  as taught by Schliemann-Willers and as evidenced by the Fomblin HC/P2-1000 product information sheet.

With respect to claim 22, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included a perfluoropolyether diphosphate in an amount of 2.0% weight of the total composition because Pantini teaches that the sun cream of Example 17a

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comprises Fomblin HC/P2-1000 in an amount of 2.0% and Fomblin HC/P2-1000 is a perfluoropolyether diphosphate as taught by Schliemann-Willers and as evidenced by the Fomblin HC/P2-1000 product information sheet.

With respect to claim 24, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included the polyphenol caffeic acid in the composition of Pantini in an amount of 2% because Cheetam teaches that caffeic acid has advantageous UV absorption qualities Example 3 of and embodies its use in an amount of 2.0% in sunscreen composition.

Claims 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pantini, Cheetam, Schliemann-Willers, and as evidenced by the Fomblin HC/P2-1000 product information sheet, as applied to claims 16-24 and 38 above and further in view of US Patent No. 5,945,090 (Randall, 1999).

Pantini does not teach inclusion of vitamin E in the sun cream of Example 17a, as set forth by instant claim 25.

Pantini does not teach inclusion of vitamin E in the sun cream of Example 17a, as set forth by instant claim 26.

Pantini does not teach inclusion of vitamin E in the sun cream of Example 17a, as set forth by instant claim 27.

Pantini does not teach inclusion of vitamin E in the sun cream of Example 17a in an amount of 0.5-10% as set forth by instant claim 28.



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Pantini does not teach inclusion of vitamin E in the sun cream of Example 17a in an amount of 0.5-10% as set forth by instant claim 29.

Pantini does not teach inclusion of vitamin E in the sun cream of Example 17a in an amount of 0.5-10% as set forth by instant claim 30.

Randall teaches that Vitamin E acetate improves skin smoothness and aids in prevention of free radical damage caused by the sun (column 3, lines 55-end). Randal embodies use of Vitamin E acetate in an amount of 0.5% of the SPF 8 sunscreen formulation of Example 1 (column 4, lines 5-end; column 5, lines 1-10).

With respect to instant claim 25, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included Vitamin E acetate in the sun cream taught by Pantini because Randall teaches that Vitamin E acetate improves skin smoothness and aids in prevention of free radical damage caused by the sun and embodies its use in a sunscreen.

With respect to instant claim 26, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included Vitamin E acetate in the sun cream taught by Pantini because Randall teaches that Vitamin E acetate improves skin smoothness and aids in prevention of free radical damage caused by the sun and embodies its use in a sunscreen.

With respect to instant claim 27, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included Vitamin E acetate in the sun cream taught by Pantini because Randall

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teaches that Vitamin E acetate improves skin smoothness and aids in prevention of free radical damage caused by the sun and embodies its use in a sunscreen.

With respect to instant claim 28, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included Vitamin E acetate in the sun cream taught by Pantini in an amount of 0.5% because Randall teaches that Vitamin E acetate improves skin smoothness and aids in prevention of free radical damage caused by the sun and embodies its use in a sunscreen in an amount of 0.5%.

With respect to instant claim 29, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included Vitamin E acetate in the sun cream taught by Pantini in an amount of 0.5% because Randall teaches that Vitamin E acetate improves skin smoothness and aids in prevention of free radical damage caused by the sun and embodies its use in a sunscreen in an amount of 0.5%.

With respect to instant claim 30, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have included Vitamin E acetate in the sun cream taught by Pantini in an amount of 0.5% because Randall teaches that Vitamin E acetate improves skin smoothness and aids in prevention of free radical damage caused by the sun and embodies its use in a sunscreen in an amount of 0.5%.

Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pantini, Cheetam, Schliemann-Willers, and Randall, as

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evidenced by the Fomblin HC/P2-1000 product information sheet as applied to claims 16-30 and 38 above, and further in view of US Patent No. 6,015,548 (Siddiqui, 2000) .

Pantini does not teach inclusion of Vitamin A in the sun cream of Example 17a as set forth by instant claim 35.

Pantini does not teach inclusion of Vitamin A in the sun cream of Example 17a as set forth by instant claim 36.

Siddiqui teaches that Vitamin A is a skin protectant which reduces production of PGE<sub>2</sub> or increases skin viability when topically applied (column 5, lines 40-55). Siddiqui embodies use of Vitamin A palmitate in water proof SPF 20 sunscreen in Examples 3 and 4 (column 14, lines 1-60).

With respect to instant claim 35, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have added Vitamin A palmitate to the sun cream composition of Example 17a of Pantini because Siddiqui teaches that Vitamin A palmitate is a skin protectant used in sunscreen formulations which reduces production of PGE<sub>2</sub> or increases skin viability when topically applied.

With respect to instant claim 36, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have added Vitamin A palmitate to the sun cream composition of Example 17a of Pantini because Siddiqui teaches that Vitamin A palmitate is a skin protectant used in sunscreen formulations which reduces production of PGE<sub>2</sub> or increases skin viability when topically applied.

Claims 31-34 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pantini, Cheetam, Schliemann-Willers, Randall, and Siddiqui as evidenced by the Fomblin HC/P2-1000 product information sheet as applied to claims 16-30, 35, 36 and 38 above, and further in view of US Patent No. 6,007,796 (Menzel, 1999).

Pantini does not teach inclusion of Vitamin C (ascorbic acid) in the sun cream of Example 17a as set forth by instant claim 31.

Pantini does not teach inclusion of Vitamin C (ascorbic acid) in the sun cream of Example 17a as set forth by instant claim 32.

Pantini does not teach inclusion of Vitamin C (ascorbic acid) in the sun cream of Example 17a as set forth by instant claim 33.

Pantini does not teach inclusion of Vitamin C (ascorbic acid) in the sun cream of Example 17a as set forth by instant claim 34.

Pantini does not teach inclusion of Vitamin A in the sun cream of Example 17a as set forth by instant claim 37.

Siddiqui teaches that Vitamin C is an antioxidant that may be added to sunscreens to improve cellular viability, reduce production of PGE2 and scavenge free radicals from skin (column 5, lines 10-30; column 6, lines 5-30)

Menzel teaches a composition which is self tanning but has a sunscreen effect (title). Menzel teaches inclusion of an antioxidant in the composition in an amount of 0.01 to 5.0% with ascorbic acid being one of the recited antioxidants

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taught for inclusion and is embodied in the SPF 6-8 cream Example 1 (column 2, lines 55-65; column 4, lines 1-55).

With respect to claim 31, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have added Vitamin C (ascorbic acid) to the sun cream composition of Example 17a of Pantini because Siddiqui and Menzel teach that vitamin C is an antioxidant which may be added to SPF formulations (i.e. sunscreens) to scavenge free radicals and improve cellular viability.

With respect to claim 32, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have added Vitamin C (ascorbic acid) to the sun cream composition of Example 17a of Pantini because Siddiqui and Menzel teach that vitamin C is an antioxidant which may be added to SPF formulations (i.e. sunscreens) to scavenge free radicals and improve cellular viability.

With respect to claim 33, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have added Vitamin C (ascorbic acid) to the sun cream composition of Example 17a of Pantini because Siddiqui and Menzel teach that vitamin C is an antioxidant which may be added to SPF formulations (i.e. sunscreens) to scavenge free radicals and improve cellular viability that is used in SPF compositions in an amount of 0.01 to 5.0% as taught by Menzel.

With respect to claim 34, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have

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added Vitamin C (ascorbic acid) to the sun cream composition of Example 17a of Pantini because Siddiqui and Menzel teach that vitamin C is an antioxidant which may be added to SPF formulations (i.e. sunscreens) to scavenge free radicals and improve cellular viability that is used in SPF compositions in an amount of 0.01 to 5.0% as taught by Menzel.

With respect to instant claim 37, it would have been *prima facie* obvious to a person of ordinary skill in the art at the time the invention was made to have added Vitamin A palmitate to the sun cream composition of Example 17a of Pantini because Siddiqui teaches that Vitamin A palmitate is a skin protectant used in sunscreen formulations which reduces production of PGE<sub>2</sub> or increases skin viability when topically applied.

### **Conclusion**

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LORI MATTISON whose telephone number is (571)270-5866. The examiner can normally be reached on 8am-6pm (Monday-Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571)272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/L. M./

Examiner, Art Unit 1619

/MP WOODWARD/

Supervisory Patent Examiner, Art Unit 1615